

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application. Please cancel claims 2-3, 7-9 and 11-12 without prejudice, amend claims 1, 4-6, 10 and 13-14 and add new claims 15-17 as follows:

LISTING OF CLAIMS:

1. (Currently Amended) An image processing apparatus, comprising:
an input unit successively receiving, as inputs, image signals
representing pixels;
a determining unit determining whether an input signal represents a
white pixel; and
an error diffusion processing unit ~~performing different processes~~
~~depended on whether the input signal represents a white pixel or not~~ which
outputs a signal representing a white pixel and does not perform calculation of
an error and subsequent distribution of the error to pixels, when the input signal
represents a white pixel,
wherein said error diffusion processing unit performs error diffusion
process using a threshold value in a binarization process smaller than a central
value of possible values of said image signal.

2. (Cancelled)

3. (Cancelled)

4. (Currently Amended) The image processing apparatus according to claim
[[2]] 1, wherein

said error diffusion processing unit changes the threshold value in accordance
with a magnitude of the signal input through said input unit.

5. (Currently Amended) The image processing apparatus according to claim
[[2]] 1, wherein

said error diffusion processing unit performs a process of subtracting a
prescribed value before distributing a calculated error, and adding the prescribed
value before performing thresholding.

6. (Currently Amended) An image processing apparatus, comprising:
an input unit successively receiving, as inputs, image signals representing
pixels;

a determining unit determining whether an input signal represents a black
pixel; and

an error diffusion processing unit ~~performing different processes depended on
whether the input signal represents a black signal or not~~ which outputs a signal
representing a black pixel and does not perform calculation of an error and
subsequent distribution of the error to pixels, when the input signal represents a
black pixel,

wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process higher than a central value of possible values of said image signal.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) A method of image processing, comprising the steps of:

successively inputting image signals representing pixels;

determining whether an input signal represents a white pixel; and

error diffusion process step ~~performing different processes dependent on whether the input signal represents a white pixel or not~~ error diffusion process step of outputting a signal representing a white pixel and not performing calculation of an error and subsequent distributing of the error to pixels, when the input signal represents a white pixel,

wherein said error diffusion process step performing error diffusion processing using a threshold value in a binarization process smaller than a central value of possible values of said image signal.

11. (Cancelled)

12. (Cancelled)

13. (Currently Amended) The method of image processing according to claim ~~[[11]]~~ 10, wherein

in said error diffusion process step, ~~[[a]]~~ the threshold value is changed in accordance with a magnitude of the signal input in said input step.

14. (Currently Amended) The method of image processing according to claim ~~[[11]]~~ 10, wherein

in said error diffusion process step, a process is performed in which a prescribed value is subtracted before distribution of calculated error, and the threshold value is added before thresholding.

15. (New) An image processing apparatus, comprising:

an input unit successively receiving as inputs, image signals representing pixels;

determining unit determining whether an input signal represents a white pixel or a black pixel; and

an error diffusion processing unit which outputs a signal representing the white pixel or the black pixel and does not perform calculation of an error and subsequent distribution of the error to pixels, when the input signal represents the white pixel or the black pixel,

wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process and changes the threshold value based on a relationship between the input and the threshold value, and

wherein the relationship is that the threshold value increases depending on the increase of the input.

16. (New) The image processing apparatus of claim 15, wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process smaller than a central value of possible values of said image signal when the input signal represents the white pixel.

17. (New) The image processing apparatus of claim 15, wherein said error diffusion processing unit performs error diffusion process using a threshold value in a binarization process higher than a central value of possible values of said image signal when the input signal represents the black pixel.